

shindaiwa®

!ADVERTENCIA!

Minimice el riesgo de accidentes contra usted u otros personas. Lea este manual y familiarícese con sus contenidos. Siempre utilice protección para los ojos y oídos cuando la máquina sea usada.



CORTADORA DE SETOS DH2510
SHINDAIWA MANUAL DEL
PROPIETARIO/OPERADOR



WARNING!

Minimize the risk of injury to yourself and others! Read this manual and familiarize yourself with the contents. Always wear eye and hearing protection when operating this unit.

shindaiwa®

General Safety Instructions

Work Safely

Shindaiwa hedge trimmers operate at very high speeds and can do serious damage or injury if they are misused or abused. *Never allow a person without training or instruction to operate your unit!*

WORK SAFELY!

Always wear close-fitting clothing. Gloves offer added protection and are strongly recommended. Do not wear clothing or jewelry that could get caught in machinery.

Never allow children to use the unit. Avoid operating near bystanders.

Always operate with both hands firmly gripping the unit.

Never operate this unit if the safety guard has been removed or damaged!

Avoid using or storing this unit in a wet environment. Water or the cutters may enter the gear-case and damage your unit.

Avoid cutting large or extremely "woody" branches. Doing so can shorten cutter life, and may also damage the gearcase.

Always keep proper footing and do not overreach. Maintain your balance at all times during operation.

WARNING!
Use Good Judgment

ALWAYS wear eye protection to shield against thrown objects.

ALWAYS protect yourself from hazards such as thorny brush and flying debris by wearing gloves and close fitting clothing that covers arms and legs. Never wear shorts. Don't wear loose clothing or items such as jewelry that could get caught in machinery or underbrush. Secure long hair so it is above shoulder level.

NGI

Inspect front and rear handles for damaged or loose attachments before use. NEVER operate a hedge trimmer with damaged or loose handles.

Instrucciones Generales de Seguridad

¡ADVERTENCIA! 
Inspecciona el freno y el traseño de los
mangos asegurandose que no haya
piezas dañadas o flojas. NUNCA opere
un corta setos con mangos dañados o
sueltos.

- **SIEMPRE** sileje la m  duina del \'rea de combusitible o de otros materiales
- **NUNCA** coloque materiales inflamables cerca del silenciador de la m  duina.
- **NUNCA** opere el motor sin la malla del guardachispas en su lugar.

Debe de estar física y mentalmente en óptimas condiciones para operar esta maquinaria con seguridad.

Nunca instale accesorios de corto no autorizados.

Figura 1 *Diagrama de los componentes de la estrategia de marketing de la marca*

```
graph TD; A[Estrategia de marketing de la marca] --> B[Objetivos de marketing]; A --> C[Estructura de la marca]; A --> D[Efectos de la estrategia]
```

Diseño de vestido

Nunca opere esta maquinaria a velocidad máxima sin carga.

Nunca opere esta maquinaria si la mano está protegida para la operación.

Nunca opere esta maquinaria si el operario no lleva un protector para la cara.

Use siempre ropa ceñida a la cintura. Use guantes de trabajo para incrementar el nivel de protección. No uses ropa o joyas que pudieran engredarse en la maquinaria. Cerciórese de que el caballo no le pase de los hombros.

Safety Equipment and Labels

ENGLISH

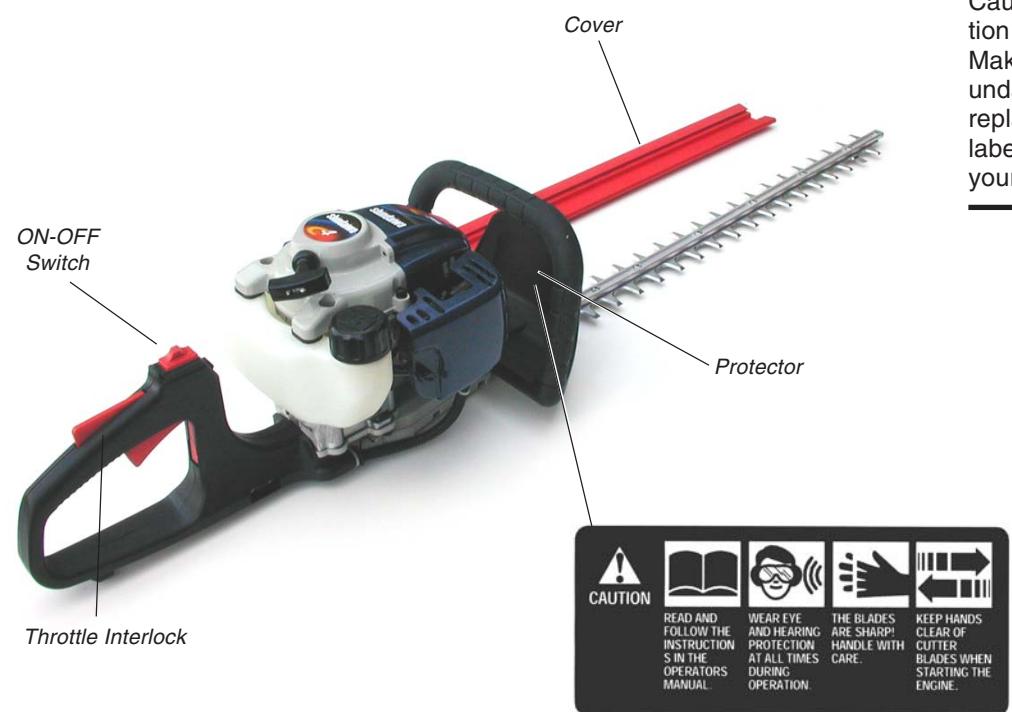
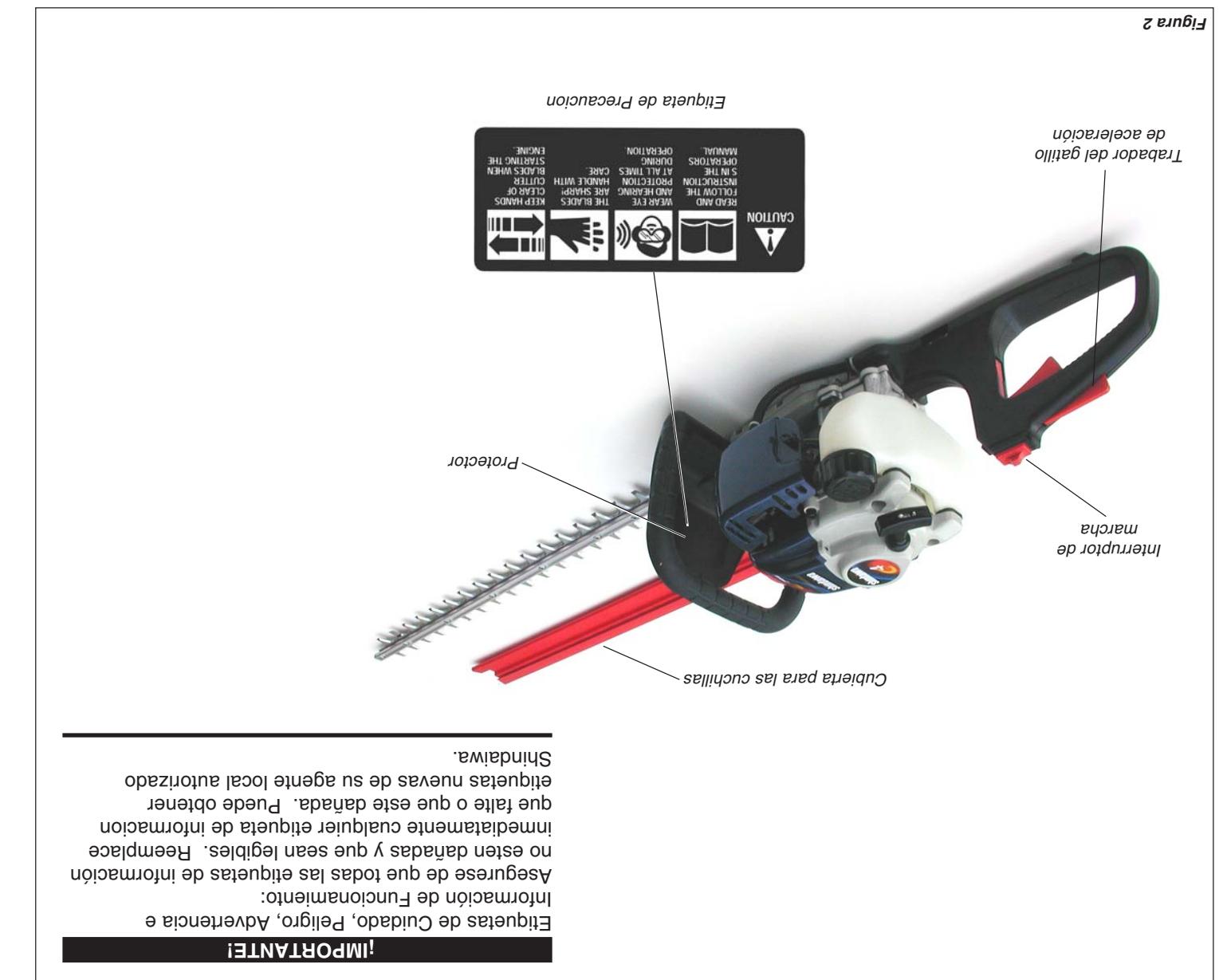


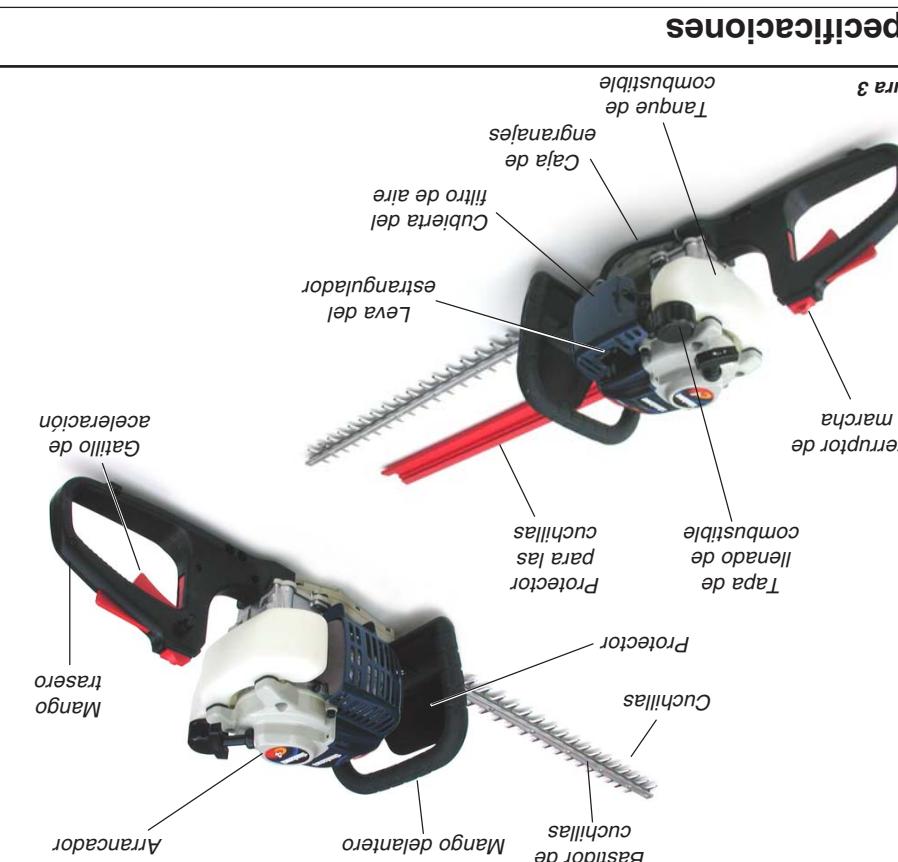
Figure 2

IMPORTANT!

Caution, Danger, Warning, and Operation Information Labels:
Make sure all information labels are undamaged and readable. Immediately replace damaged or missing information labels. New labels are available from your local authorized Shindaiwa dealer.

Figura 2

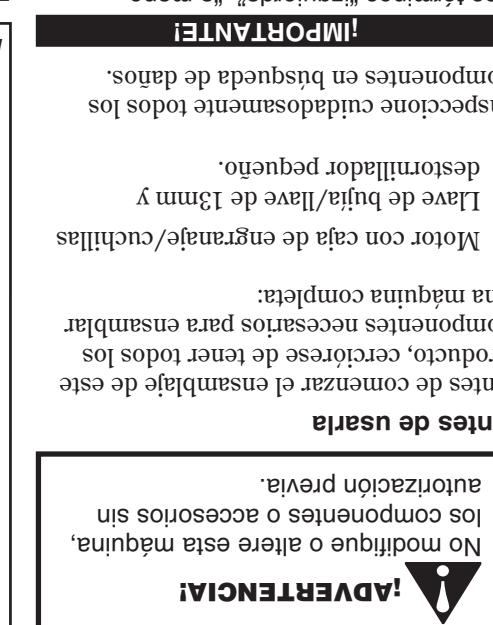




Descripción del Producto

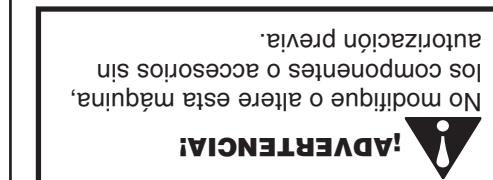
Dimensiones de la cortadora de setos (longitud x ancho x altura)	DH2510-30: 5.9 kg (13.0 lb)
Peso neto, unidad completa sin combustible	DH2510-24: 5.8 kg (12.8 lb)
Modelo	DH2510-24/DH2510-30
Modelo de motor	SDH2510
Tipo de motor	2-Tiempos, cilíndro horizontal, enfriado por aire
Proporción de combustible/aceite	50:1 con aceite de mezclar para motores de 2-Tiempos ISO-L-EGD o JASO FC.
Potencia	1.1 hp (.82kw) @ 7,500 rpm (min ⁻¹)
Dimensiones	DH2510-24: 1100 x 245 x 230mm
Dimensiones	DH2510-30: 1220 x 245 x 230mm
Capacidad del tanque de combustible	0.55 l/18.6 oz.
Carburador	Walbro WYJ
Sistema de encendido	Electrónico, controlado por programa
Bujía:	NGK CMR5H
Filtro de aire	Elemento no reversible Shindaiwa Premium
Método de arranque	Arrancador manual de resorte recular
Método de parada	Interruptor deslizante de parada
Cuchillas Longitud	DH2510-24: 610mm; DH2510-30: 740mm
Cuchillas	Double Clutch, Lado Sígular
Cuchillas.	Centrífuga, tipo seco de dos zarpas
Lubricación	Grasa a base de aceite de zinc
Engranajes	Centrífugas, tipo seco de dos zarpas
Equipo estándar	Equipo de control de aceleración, mango delantero con protector para la mano.
Mango delantero	Mango trasero con control de aceleración, llave de bujía y cubierta protectora para las cuchillas.
Cuchillas.	*Regulaciones de Emisiones EPA.
Cuchillas.	**Regulaciones de Emisiones EPA.
Cuchillas.	Especificaciones sujetas a cambio sin previo aviso.

Especificaciones



ANTES DE USARLA

- Motor con caja de engranaje/cuchillas
- Llave de bujía/llave de 13mm y destornillador pedretejo.
- Inspección cuidadosamente todos los componentes en busca de daños.
- Antes de comenzar el ensamblaje de este producto, cerciórese de tener todos los componentes necesarios para ensamblar la máquina completa.



Güiamose por las ilustraciones familiares con su máquina y los varios componentes. Conociendo su máquina le ayudará obtener alto rendimiento, vida útil más larga y tránsito más prolongado y tránsito con servicio.

seguiría más prolongada y tránsito con servicio.

**Shindaiwa ONE es un registrada JASO FC clasificada aceite y también cumple o supera ISO-L-EGD rendimiento.

**Las normas de emisión EPA.

**Regulaciones de Emisiones EPA.

Y A = 300 horas (Extendida). B = 125 horas (Medio).

Y B = 50 horas (Medio). C = 50 horas (Federado). Categoría C = 50 horas de operación en la máquina indica el número de horas de operación en la máquina cumplen con las regulaciones de emisiones.

Las normas de emisión EPA.

Una cumple o excede esta especificación es recomendado para todos los productores.

El aceite de mezclar Shindaiwa Premium es recomendado para todos los productores.

Este cumple o excede esta especificación y es recomendado para todos los productores.

Shindaiwa.

El elemento no reversible Shindaiwa Premium es recomendado para todos los productores.

El aceite de mezclar Shindaiwa Premium es recomendado para todos los productores.

Shindaiwa.

El aceite de mezclar Shindaiwa Premium es recomendado para todos los productores.

Shindaiwa.

El aceite de mezclar Shindaiwa Premium es recomendado para todos los productores.

Shindaiwa.

El aceite de mezclar Shindaiwa Premium es recomendado para todos los productores.

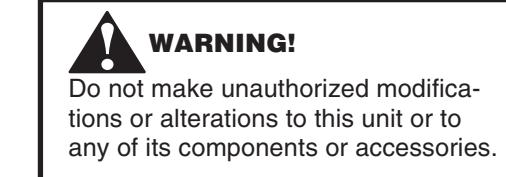
Shindaiwa.

El aceite de mezclar Shindaiwa Premium es recomendado para todos los productores.

Shindaiwa.

Unit Description

Using the accompanying illustrations as a guide, familiarize yourself with your unit and its various components. Understanding your unit helps ensure top performance, long service life, and safer operation.



Prior to use

Before using this product, please make sure you have all the components required for a complete unit:

- Engine assembly and gearcase/cutter assembly
- Combination spark plug/13mm wrench

Carefully inspect all components for damage.

IMPORTANT!

The terms "left," "left-hand," and "LH"; "right," "right-hand," and "RH"; "front" and "rear" refer to directions as viewed by the operator during normal operation of this product.

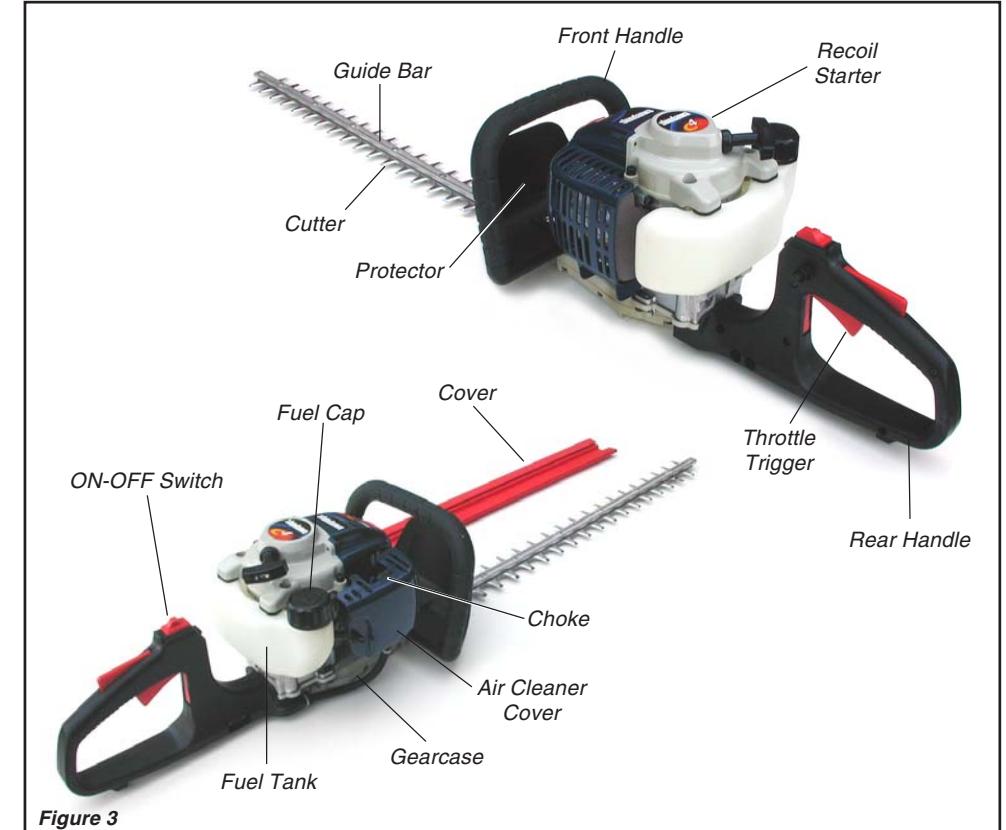


Figure 3

Specifications

Model	DH2510-24/DH2510-30
Engine Model	SDH2510
Engine Type	4-cycle, horizontal cylinder, air cooled
Engine Bore x Stroke	34mm x 27mm
Engine Displacement	24.5cc
Unit Weight, Less Fuel	DH2510-24: 5.8 kg (12.8 lb) DH2510-30: 5.9 kg (13.0 lb)
Unit Dimensions (LxWxH)	DH2510-24: 1100 x 245 x 230mm DH2510-30: 1220 x 245 x 230mm
Max. Power	1.1 hp (.83kw)@ 7,500 rpm (min ⁻¹)
Fuel/oil ratio	50:1 with *ISO-L-EGD or JASO FC class 2-cycle Mixing Oil
Fuel Tank Capacity	0.55 liter/18.6 oz.
Carburetor	Walbro WYJ, Diaphragm type
Ignition	Fully electronic, program controlled
Spark Plug	NGK CMR5H
Air Cleaner	Non-reversible heavy-duty filter element
Starting Method	Recoil type
Stopping Method	Slide switch, grounding type
Blade Length	DH2510-24: 610mm; DH2510-30: 740mm
Blade Type	Double-blade cutting action: Double-edged blade
Clutch Type	Centrifugal clutch, dry-type
Gear Type	Spur gears
Gear Lubrication	Lithium-based grease
Standard Equipment	Rear handle with integral controls, anti-vibe mountings, front handle with guard, spark plug wrench and blade scabbard (cover).
**EPA Emission Compliance Period	Category A

Specifications are subject to change without notice.

Mixing Fuel

CAUTION!

Some types of gasoline contain alcohol as an oxygenate. Oxygenated gasoline may cause increased operating temperatures. Under certain conditions, alcohol-based gasoline may also reduce the lubricating qualities of some 2-cycle mixing oils. Never use any type of gasoline containing more than 10% alcohol by volume! Generic oils and some outboard oils may not be intended for use in high-performance 2-cycle type engines, and should never be used in your Shindaiwa engine.

CAUTION!

This engine is certified to operate on a 50:1 mixture consisting of unleaded gasoline and ISO-L-EGD or JASO FC class 2-cycle mixing oil only. Use of non-approved mixing oils in catalyst equipped units can lead to excessive carbon deposits.

- Use only fresh, clean unleaded gasoline with a pump octane of 87 or higher.
- Mix all fuel with a 2-cycle air-cooled mixing oil that meets or exceeds ISO-L-EGD and/or JASO FC classified oils at 50:1 gasoline/oil ratio.

Examples of 50:1 mixing quantities

- 1 gallon of gasoline to 2.6 oz. mixing oil
- 5 liters of gasoline to 100 ml. mixing oil

IMPORTANT!

Mix only enough fuel for your immediate needs! If fuel must be stored longer than 30 days and **ONE** oil with fuel stabilizer is not used, it should first be treated with a fuel stabilizer such as StaBil™.

shindaiwa ONE Oil is a registered JASO FC classified oil and also meets or exceeds ISO-L-EGD performance requirements. Shindaiwa One is recommended for use in all Shindaiwa low emissions engines. Shindaiwa One also includes a fuel stabilizer.

Filling the Fuel Tank

WARNING!

Minimize the risk of fire!

- Always allow the trimmer to cool before refueling!
- Wipe all spilled fuel and move the trimmer at least 10 feet (3 meters) from the fueling point before restarting!
- Never smoke or light any fires near the trimmer or fuel!
- Never place any flammable material near the engine muffler!
- Never operate the engine without the muffler and spark arrester in place and properly functioning!

1. Place the trimmer on a flat, level surface.
2. Clear any dirt or other debris from around the fuel filler cap.
3. Remove the fuel cap, and fill the fuel tank with clean, fresh fuel mixture.
4. Install and firmly tighten the fuel cap.

Combustible
Llenado del tanque de
combustible
■ IMPORTANTE!
■ PRECAUCIÓN!
■ ADVERTENCIA!
■ DISMINUYA EL RIESGO DE INCENDIOS!

■ Es un aceite registrado JASO FC que cumple con los requerimientos ISO-L-EGD para motor rendimiento. Shindaiwa recomienda para el uso de gasolina con más de 10% de etanol. ■ Alcohol es un combustible que cumple con los requerimientos ISO-L-EGD para motor rendimiento. Shindaiwa recomienda para el uso de gasolina con más de 10% de etanol. ■ Es un aceite certificado para el uso de gasolina mezcla de 50:1. ■ Utilice gasolina sin plomo nunca y mezcla de 50:1. ■ Utilice gasolina de etanol en grado de octanato de 87 o más alto. ■ Mezcle combustible con aceite mezcla de 50:1. ■ Para motor de 2 tiempos enfríado por aire que cumple con ISO-L-EGD y/o JASO FC a proporción de 50:1. ■ Utilice gasolina de etanol en grado de octanato de 87 o más alto. ■ Limpiar la cartera de setos DH2510 en el suelo o sobre una superficie plana. ■ Limpiar el polvo y los desechos de carteres de la superficie de la tapa de llenado de combustible. ■ Remueva lentamente la tapa de llenado de combustible. ■ Reinstale la tapa de llenado y apriete la firme mente.

■ Utilice gasolina sin plomo nunca y mezcla de 50:1. ■ Utilice gasolina de etanol en grado de octanato de 87 o más alto. ■ Limpiar la cartera de setos DH2510 en el suelo o sobre una superficie plana. ■ Limpiar el polvo y los desechos de carteres de la superficie de la tapa de llenado de combustible. ■ Remueva lentamente la tapa de llenado de combustible. ■ Reinstale la tapa de llenado y apriete la firme mente. ■ Utilice gasolina sin plomo nunca y mezcla de 50:1. ■ Utilice gasolina de etanol en grado de octanato de 87 o más alto. ■ Limpiar la cartera de setos DH2510 en el suelo o sobre una superficie plana. ■ Limpiar el polvo y los desechos de carteres de la superficie de la tapa de llenado de combustible. ■ Remueva lentamente la tapa de llenado de combustible. ■ Reinstale la tapa de llenado y apriete la firme mente.

■ Utilice gasolina sin plomo nunca y mezcla de 50:1. ■ Utilice gasolina de etanol en grado de octanato de 87 o más alto. ■ Limpiar la cartera de setos DH2510 en el suelo o sobre una superficie plana. ■ Limpiar el polvo y los desechos de carteres de la superficie de la tapa de llenado de combustible. ■ Remueva lentamente la tapa de llenado de combustible. ■ Reinstale la tapa de llenado y apriete la firme mente.

■ Utilice gasolina sin plomo nunca y mezcla de 50:1. ■ Utilice gasolina de etanol en grado de octanato de 87 o más alto. ■ Limpiar la cartera de setos DH2510 en el suelo o sobre una superficie plana. ■ Limpiar el polvo y los desechos de carteres de la superficie de la tapa de llenado de combustible. ■ Remueva lentamente la tapa de llenado de combustible. ■ Reinstale la tapa de llenado y apriete la firme mente.

Troubleshooting Guide

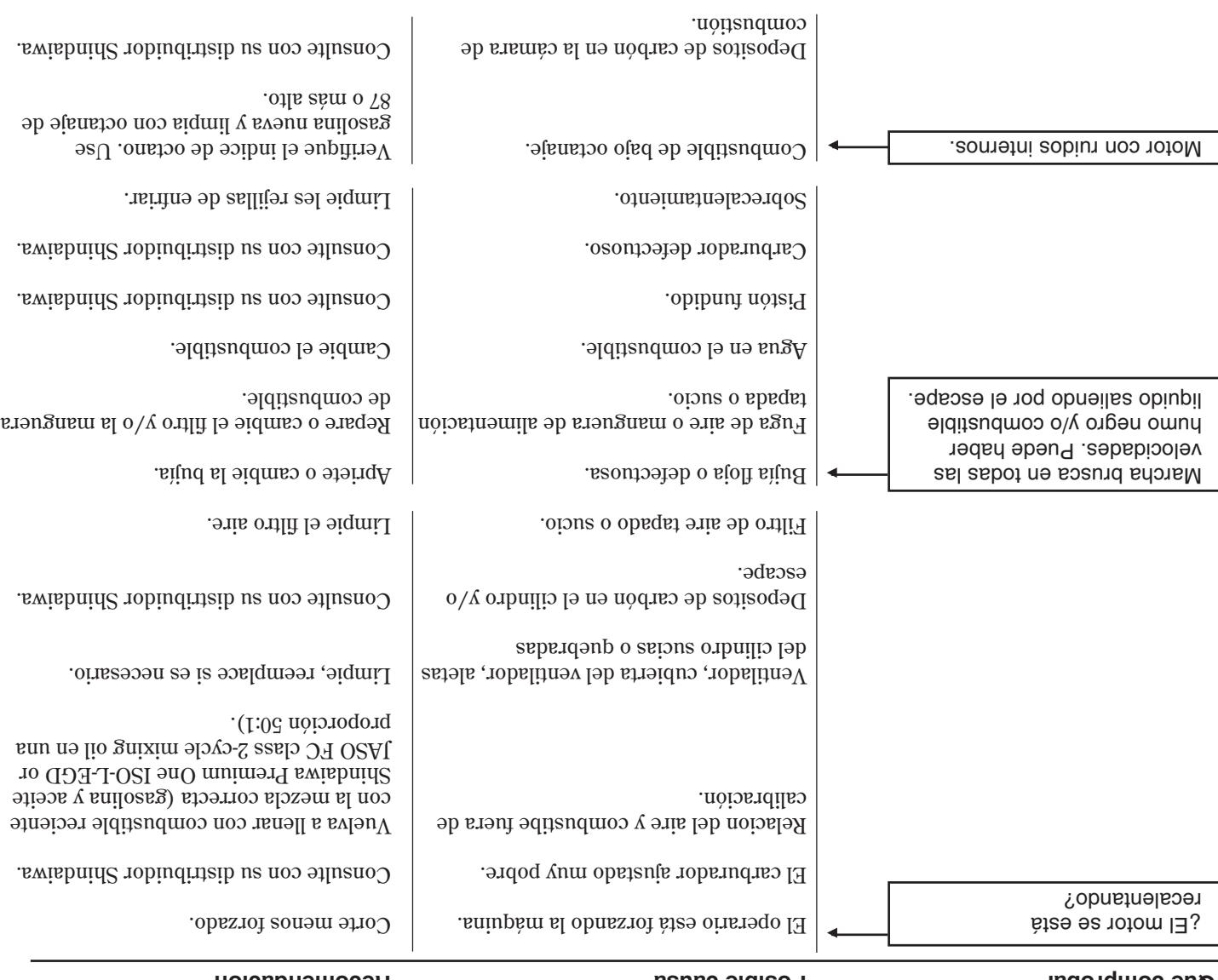
ENGINE DOES NOT START OR HARD TO START

What To Check	Possible Cause	Remedy
Vaporlock	Engine hot/heatsoaked. Low fuel quality.	Let cool completely and restart. Refill with fresh, clean unleaded gasoline with a pump octane of 87 or higher mixed with a 2-cycle air cooled mixing oil that meets or exceeds ISO-L-EGD and/or JASO FC classified oils at 50:1 gasoline/oil ratio.
Valve adjustment	Valve clearance too tight. Valve clearance too loose.	Adjust valves. See page 11.

ENGINE DOES NOT START

What To Check	Possible Cause	Remedy
Does the engine crank?	NO Faulty recoil starter. Fluid in the crankcase. Internal damage.	Consult with an authorized servicing dealer.
YES Good compression?	NO Loose spark plug. Excess wear on cylinder, piston, rings.	Tighten and re-test. Consult with an authorized servicing dealer.
YES Does the tank contain fresh fuel of the proper grade?	NO Fuel incorrect, stale, or contaminated; mixture incorrect.	Refill with fresh, clean unleaded gasoline with a pump octane of 87 or higher mixed with a 2-cycle air cooled mixing oil that meets or exceeds ISO-L-EGD and/or JASO FC classified oils at 50:1 gasoline/oil ratio.
YES Is fuel visible and moving in the return line when priming?	NO Check for clogged fuel filter and/or vent.	Clean as required; restart.
YES Is there spark at the spark plug wire terminal?	NO The ignition switch is in "O" (OFF) position. Shorted ignition ground. Faulty ignition unit.	Move switch to "I" (ON) position and re-start. Consult with an authorized servicing dealer.
YES Check the spark plug.	If the plug is wet, excess fuel may be in the cylinder. The plug is fouled or improperly gapped. The plug is damaged internally or of the wrong size.	Crank the engine with the plug removed, reinstall the spark plug, and re-start. Clean and re-gap the spark plug to 0.024 inch (0.6 mm). Re-start. Replace the spark plug with a NGK CMR5H or equivalent spark plug of the correct heat range. Adjust the spark plug electrode gap to 0.024-inch (0.6 mm).

Troubleshooting Guide (continued)



LOW POWER OUTPUT		
What To Check	Possible Cause	Remedy
Is the engine overheating?	Operator is overworking the unit. Carburetor mixture is too lean. Improper fuel ratio. Fan, fan cover, cylinder fins dirty or damaged. Carbon deposits on the piston or in the muffler.	Cut at a slower rate. Consult with an authorized servicing dealer. Refill with fresh, clean unleaded gasoline with a pump octane of 87 or higher mixed with a 2-cycle air cooled mixing oil that meets or exceeds ISO-L-EGD and/or JASO FC classified oils at 50:1 gasoline/oil ratio. Clean, repair or replace as necessary. Consult with an authorized servicing dealer.
	Engine is rough at all speeds. May also have black smoke and/or unburned fuel at the exhaust.	Service the air cleaner.
	Loose or damaged spark plug.	Tighten or replace. Replace the spark plug with a NGK CMR5H or equivalent spark plug of the correct heat range. Adjust the spark plug electrode gap to 0.024-inch (0.6 mm).
	Air leakage or clogged fuel line.	Repair or replace fuel filter and/or fuel line.
	Water in the fuel.	Refill with fresh, clean unleaded gasoline with a pump octane of 87 or higher mixed with a 2-cycle air cooled mixing oil that meets or exceeds ISO-L-EGD and/or JASO FC classified oils at 50:1 gasoline/oil ratio.
	Piston seizure.	Consult with an authorized servicing dealer.
	Faulty carburetor and/or diaphragm.	Consult with an authorized servicing dealer.
Engine is knocking.	Overheating condition. Improper fuel. Carbon deposits in the combustion chamber.	See above. Check fuel octane rating; check for presence of alcohol in the fuel (pg. 6). Refuel as necessary. Consult with an authorized servicing dealer.

Troubleshooting Guide (continued)

ENGLISH

ADDITIONAL PROBLEMS

Symptom	Possible Cause	Remedy
Poor acceleration.	Clogged air cleaner element.	Clean the air cleaner element.
	Clogged fuel filter.	Replace the fuel filter.
	Carburetor mixture too lean.	Consult with an authorized servicing dealer.
	Idle speed set too low.	Adjust: 3,000 (± 250) rpm (min^{-1})
Engine stops abruptly.	Switch turned off.	Reset the switch and re-start.
	Fuel tank empty.	Refuel.
	Clogged fuel filter.	Replace filter.
	Water in the fuel.	Drain and refill with fresh, clean unleaded gasoline with a pump octane of 87 or higher mixed with a 2-cycle air cooled mixing oil that meets or exceeds ISO-L-EGD and/or JASO FC classified oils at 50:1 gasoline/oil ratio.
	Shorted spark plug or loose terminal.	Clean and replace spark plug, tighten the terminal.
	Ignition failure.	Consult with an authorized servicing dealer.
	Piston seizure.	Consult with an authorized servicing dealer.
Engine difficult to shut off.	Ground (stop) wire is disconnected, or switch defective.	Test and replace as required.
	Overheating due to incorrect spark plug.	Replace the spark plug with a NGK CMR5H or equivalent spark plug of the correct heat range. Adjust the spark plug electrode gap to 0.024-inch (0.6 mm).
	Overheated engine.	Idle engine until cool. Refer to page 13 (overheated engine).
Cutting attachment moves at engine idle.	Engine idle too high.	Set idle: 3,000 (± 250) rpm (min^{-1})
	Broken clutch spring or worn clutch spring boss.	Replace spring/shoes as required, check idle speed.
Excessive vibration.	Warped or damaged cutters.	Inspect and repair cutters as required.
	Loose gearcase.	Tighten gearcase securely.
	Damaged crankshaft/worn or damaged bushings.	Inspect and replace as necessary.
Cutting attachment will not move.	Damaged/worn clutch.	Inspect and replace as required.
	Damaged gearcase.	Consult with an authorized servicing dealer.
Sintoma	Posible causa	Recomendación
Aceleración pobre.	Filtro de aire sucio.	Limpie el filtro de aire.
	Filtro de combustible sucio.	Cambie el filtro de combustible.
	Carburador calibrado muy pobre.	Consulte con su distribuidor Shindaiwa.
	Carburador calibrado muy basa.	Ajuste: a 3,000 (± 250) rpm (min^{-1})
	El motor se apaga bruscamente.	Muévala el botón del interruptor en la posición I y.
	Tanque de combustible vacío.	Vuelva a arrancar el motor.
	Filtro de combustible obstruido.	Vuelva a llenar con combustible limpio.
	Agua en el combustible.	Drene. Vuelva a llenar con combustible limpio.
	Bujía en cortocircuito o terminal flojo.	Reemplace la bujía.
	Falla en el sistema de encendido.	Consulte con su agente autorizado Shindaiwa.
	Pistón trabado en el cilindro.	Consulte con su agente autorizado Shindaiwa.
	Se hace difícil apagar el motor.	Cable de conexión a tierra desconectado o el interruptor está defectuoso.
	El accesojo de corte gira con el motor en marcha mínima.	Haga funcionar el motor en marcha mínima hasta que enfrie un poco. Ajuste marcha mínima ajustada demasiado. Marca mínima
	Resorte del embague quebrado o saltante del resorte del embague desgastado.	Consulte con su agente autorizado Shindaiwa.
	Cuchilla torcida o dañada.	Apretete le perno firmemente.
	Caja de engranaje fija.	Apretete caja de engranaje fija mente.
	Cigüeñal dañado/viejo o bujes dañados.	Ajuste caja de engranaje fija mente.
	Caja de engranaje dañada.	Consultar con un técnico autorizado de servicio.
	Embrague dañado/viejo.	Inspecciónar y reemplazar cuando sea necesario.
	Conección de cuchilla no se move.	Cuchilla de engranaje dañada.

NOTES:

shindaiwa®

Shindaiwa Inc.
11975 S.W. Herman Rd.
Tualatin, Oregon 97062
Telephone: 503 692-3070
Fax: 503 692-6696
www.shindaiwa.com

Shindaiwa Kogyo Co., Ltd.
Head Office: 6-2-11 Ozuka
Nishi, Asaminami-ku
Hiroshima, 731-3167, Japan
Telephone: 81-82-849-2220
Fax: 81-82-849-2481

©2004 Shindaiwa, Inc.
Part Number 80844
Revision 5/04

Shindaiwa is a registered trademark
of Shindaiwa, Inc.
Specifications subject to change without
notice.

Shindaiwa Kogyo Co., Ltd.
Head Office: 6-2-11 Ozuka
Nishi, Asaminami-ku
Hiroshima, 731-3167, Japan
Telephone: 81-82-849-2220
Fax: 81-82-849-2481
Part Number 80844
Revision 5/04
Shindaiwa is a registered trademark
of Shindaiwa, Inc.
Specifications subject to change without
notice.

Shindaiwa Inc.
11975 S.W. Herman Rd.
Tualatin, Oregon 97062
Telephone: 503 692-3070
Fax: 503 692-6696
www.shindaiwa.com

shindaiwa®

NOTAS: